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| APPLICATION NO.                                                                                                  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 09/808,376                                                                                                       | 03/14/2001  | Pantelis Monogioudis | 17-33               | 3329             |
| 22046                                                                                                            | 7590        | 06/18/2004           | EXAMINER            |                  |
| LUCENT TECHNOLOGIES INC.<br>DOCKET ADMINISTRATOR<br>101 CRAWFORDS CORNER ROAD - ROOM 3J-219<br>HOLMDEL, NJ 07733 |             |                      | WANG, TED M         |                  |
|                                                                                                                  |             |                      | ART UNIT            | PAPER NUMBER     |
|                                                                                                                  |             |                      | 2634                | 5                |

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/808,376

Applicant(s)

MONOGIOUDIS ET AL.

Examiner

Ted M Wang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 3/14/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-5 and 11 is/are allowed.
- 6) ☒ Claim(s) 1, 6 and 10 is/are rejected.
- 7) ☒ Claim(s) 2 and 7-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1-11 are pending in the application.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Stein (US5,917,837).

- In regard claim 1, Stein discloses a method for performing decoding of codes with the use of side information associated with the encoded data comprising the steps of receiving a signal (Fig.3, 4 and 6); processing the received signal to generate a Yamamoto-Itoh (YI) metric (Fig.4 and 6 and column 6 lines 20-25 and column 8 lines 3-9); and providing a Bit-Error-Rate (BER) or Symbol-Error-Rate (SER) estimate for the received signal as a function of the YI metric (Fig.4 and 6 and column 6 lines 6-19, and column 7 line 56 – column 8 line 2).
- In regard claim 6, which is an apparatus claim related to claim 1, all limitation is contained in claim 1. The explanation of all the limitation is already addressed in the above paragraph.

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4. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Kindred et al. (US5,710,784).

- In regard claim 11, Kindred et al. discloses a multi-rate serial Viterbi decoder for CDMA system applications with a processor (Fig.1 element 30); and a memory for storing a look-up table (Fig.9 element 88 and column 13 line 61 – column 16 line 29); wherein the processor uses a Yarnamoto-Itoh (YI) metric value as in index into the look-up table to retrieve an associated Bit-Error-Rate (BER) or Symbol-Error-Rate (SER) for a received signal (Fig.9 element 88 and column 13 line 61 – column 16 line 29, and column 16 line 66 – column 17 line 19).

***Allowable Subject Matter***

5. Claims 2, and 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 3-5 and 11 are allowed.

7. The following is an examiner's statement of reasons for allowance:

- The prior art fails to teach a system, and an apparatus, and a method of Claims 3-5 and 11 that specifically comprises the steps of:
  - selecting a compensation factor value as a function of the provided YI metric value as recited; and
  - selecting an initial BER estimate value as a function of the provided YI metric value as recited; and

-- providing a Bit-Error-Rate (BER) estimate for the received signal as a function of the initial BER estimate value and the selected compensation factor value as recited.

Stein (US5,917,837), Kindred et al. (US5,710,784), and Chen (US5,751,725) do not teach above features.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

8. Reference Stein (US6,175,590) and Chen (US5,751,725) are cited because they are put pertinent to the Viterbi decoder with Yamamoto metric. However, none of references teach detailed connection as recited in claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M Wang whose telephone number is (703) 305-0373. The examiner can normally be reached on 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Chin can be reached on (703) 305-4714. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Ted M Wang  
Examiner  
Art Unit 2634

Ted M. Wang



STEPHEN CHIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600